



LUMMI INDIAN BUSINESS COUNCIL

2616 KWINA ROAD · BELLINGHAM, WASHINGTON 98226 · (360)384-1489

DEPARTMENT _____ DIRECT NO. _____

February 26, 2009

Dear Resident of the Lummi Indian Reservation:

This letter is being sent to you for informational purposes only because your property is very likely located in the floodplain as shown on the Federal Emergency Management Agency's (FEMAs) Flood Insurance Rate Maps (FIRMs). The Lummi Nation is working on ways to improve and increase its circulation of and accessibility to information that pertains to the floodplain, in an effort to better educate and assist Reservation residents about developing and living in the floodplain. Please take the time to read the information below, and if you have further questions or would like additional information, please contact one of the resources listed at the end of this document.

Overview

As you know, the Lummi Indian Reservation is located at the mouth of the Nooksack River and along the western border of Whatcom County, Washington. The Nooksack River drains a watershed of 786 square miles, flows through the Reservation near the mouth of the river, and discharges to Bellingham Bay (and partially to Lummi Bay during high flows). The Reservation is also located at the southern extent of Georgia Strait and the northern extent of Puget Sound. This location means that Reservation is susceptible to both riverine and coastal flooding. A majority of the northern portion of the Reservation is floodplain for the Nooksack River. The Sandy Point Peninsula and the Gooseberry Point area are two of the main areas susceptible to coastal flooding. There are approximately 2,909 structures with an estimated value of over \$55 million located within the mapped floodplain on the Reservation. The Reservation flood hazard areas are shown on the attached map.

Recent Flooding Events

Riverine Flooding. Most major floods recorded on the Nooksack River occurred from late October through February. Events occur annually during this period that lead to the closure of the major access routes to the Reservation: Marine Drive and Slater Road. Both Marine Drive and Slater Road were closed as recently as January 2009. The November 10, 1990 (Veteran's Day) flood was typical of a severe Nooksack River flood. This flood was the highest on record at the Ferndale river gage, approximately two miles north of the Reservation. With a calculated flow of 57,000 cubic feet per second (cfs), it was estimated to be a 59-year flood (i.e., to have an average return frequency of once in 59 years, which translates to a 1.7 percent chance of occurring in any given year). This flood caused the closure of five major roads including Marine Drive, Slater Road, and Haxton Way and flooded approximately 4,100 acres of the 12,500 upland acres of the Reservation. The flooding damaged 20 private residences, two businesses, and two natural resource production facilities. The January 2009 flood was similar in size and impact. Since 1983 there have been three 50-year, six 10-year, and eleven 5-year floods. Other major known floods before the establishment of the stream gage in Ferndale in 1935 occurred in 1883, 1891, 1893 or 1894, 1901, and 1927. Data from the adjacent Skagit River basin also indicate extreme floods in Western Washington in 1815, 1856, and 1909.

Coastal Flooding. Coastal flooding in Puget Sound occurs most frequently during the winter months, when the highest tides of the year combine with the storm surge and waves generated by winter windstorms. The areas with the greatest probability of coastal flooding are the Sandy Point Peninsula and the Neptune Beach area in the northwestern part of the Reservation and, to a lesser degree, Gooseberry Point and portions of the southeastern shoreline of the Lummi Peninsula. The Sandy Point area has been most recently flooded by larger storm events in 2001, 2000, 1993, 1982, and 1975. The combination of 70 mph sustained winds and a high tide of 10.5 feet during the 2000 event was estimated to have caused approximately \$750,000 in damage. Coastal flooding has occurred at Gooseberry Point most recently during December 2000 and 2001, January and November of 2003, and February of 2006.

Along the southeastern shoreline of the Lummi Peninsula, coastal flooding has inundated stretches of Lummi Shore Road and portions of some properties in the Hermosa Beach area that lie landward of the road.

Please see the Lummi Nation's Multi Hazard Mitigation Plan, <http://www.lummi-nsn.gov/NR/Water> for more information on historic flooding events.

Flood Insurance

The Lummi Nation participates in the National Flood Insurance Program (NFIP) that makes federally backed flood insurance available for all structures, whether or not they are located within the floodplain. More than 25 percent of NFIP claims are filed by properties located outside the 100-year floodplain, also known as the Special Flood Hazard Area (SFHA). Homeowner policies do not cover floods. Following the purchase of flood insurance, NFIP imposes a 30-day waiting period, so residents should purchase insurance before the onset of the rainy season to ensure coverage during the flooding season.

Membership within NFIP, and the availability of flood insurance to Reservation residents, requires the tribe to manage its floodplain in ways that meet or exceed standards set by FEMA. The NFIP insures buildings with two types of coverage: structural and contents. Structural coverage includes walls, floors, insulation, furnace and other items permanently attached to the structure. Contents coverage may be purchased separately to cover the contents of an insurable building. Flood insurance also pays a portion of the costs of actions taken to prevent flood damage.

Since July 1, 1997, all NFIP policies include Increased Cost of Compliance coverage that assists with bringing structures into compliance with current building standards, such as elevating structures 1 foot or more above the height of the 100-year flood. The limit of this coverage is \$30,000.

Federal financial assistance requires the purchase of flood insurance for buildings located within the SFHA — a requirement that affects nearly all mortgages financed through commercial lending institutions. This mandatory requirement stipulates that structural coverage be purchased equal to the amount of the loan, or other financial assistance, or for the maximum amount available, which is currently \$250,000 for a single family residence. While the mandatory flood insurance purchase requirement has been in effect for many years, not all lending institutions required flood insurance in the past. Today, however, most institutions are now requiring the flood insurance purchase, and some are reviewing all mortgage loans to determine whether flood insurance is required and should have been required in the past. Upon refinancing a loan, nearly all lending institutions will enforce the flood insurance requirement. It is the lender's responsibility to check the Flood Insurance Rate Map (FIRM) to determine whether a structure is within the SFHA.

The mandatory flood insurance purchase requirement does not apply to loans or financial assistance for items that are not eligible for flood insurance coverage, such as vehicles, business expenses, landscaping and vacant lots. The requirement also does not apply to loans for structures not located in a SFHA, even though a portion of the lot may be within a SFHA. Persons located within SFHAs who received disaster assistance after Sept. 23, 1994 for flood losses to real or personal property must purchase and maintain flood insurance coverage, otherwise future disaster assistance will be denied.

Floodplain Understanding and Regulation

Following are some suggestions and information for understanding the ways that floodplains function and how the tribe regulates the floodplain in order to protect property and lives, while affording Reservation residents the ability to obtain floodplain insurance.

Obtain a floodplain development permit and / or building permit, if required: The tribe regulates development in the floodplain through Title 15A of the Lummi Code of Laws, the Flood Damage Prevention Code. Title 15A requires a floodplain permit to be issued for all development in the floodplain, including structures, filling, grading, paving, excavation, and drilling operations. To minimize damage to structures during flood events, the Lummi Nation requires that all new construction in the floodplain be anchored to prevent flotation, collapse, or lateral movement of the structure, constructed with materials and utility equipment resistant to flood damage, constructed using methods and practices that minimize flood damage, and have the lowest floor, including the basement, elevate one foot above the base flood

elevation. Structures must also have service facilities designed, elevated, or located to prevent water from entering or accumulating within the components and have openings in fully enclosed areas below the lowest floor. These standards apply to new structures and to substantial improvements of existing structures. The tribe defines a Substantial Improvement as any repair, reconstruction, or improvement of a structure, the cost of which equals or exceeds 50 percent of the market value of the structure. Tribal staff are available to undertake site visits, if requested, to review flood, drainage, and sewer issues.

Contact the Lummi Nation Planning Department at (360) 384-2307 for further information and prior to undertaking any activity within the floodplain.

Do not dump or throw anything into ditches or streams: The tribe regulates activities in streams and wetlands through Title 17 of the Lummi Code of Laws, the Water Resources Protection Code. Title 17 prohibits alterations or discharges into Lummi Nation Water without a permit authorizing such activities and it is the intent of the Lummi Nation to achieve no net loss of streams, wetlands, and their functions, including flood control. A plugged channel cannot carry water, and when it rains, the excess water must go somewhere. Trash and vegetation dumped into a stream degrades water quality of both the stream itself and its receiving waters, and every piece of trash contributes to flooding. Please report any observations of the dumping of debris or other objects into streams, drainageways, or rivers to the Lummi Water Resources Division at (360) 384-2212

Remove debris, trash, loose branches and vegetation: Keep banks clear of debris to help maintain an unobstructed flow of water in stream channels. Do not, however, remove vegetation that is actively growing on a stream bank. Streamside vegetation is regulated by tribal, state and federal regulations. Before undertaking any removal of streamside vegetation, contact the Lummi Nation Planning Department at (360) 384-2307 and the Lummi Nation Department of Natural Resources at (360) 384-2267. Please report any observations of the clearing of vegetation or trees on stream banks to the Natural Resources Department at (360) 384-2267.

Recognize the natural and beneficial functions of floodplains to help reduce flooding: Floodplains are a natural component of the Reservation environment. Understanding and protecting the natural functions of floodplains helps reduce flood damage and protect resources. When flood water spreads out across the floodplain, its energy is dissipated, which results in lower flood flows downstream, reduced erosion of the streambank and channel, deposition of sediments higher in the watershed, and improved groundwater recharge. Floodplains are scenic, valued wildlife habitat, and suitable for farming. Poorly planned development in floodplains can lead to streambank erosion, loss of valuable property, increased risk of flooding to downstream properties, and degradation of water quality.

Reduce risk of damage to homes: Practical and cost-effective methods for reducing or eliminating the risk of flooding are available to property owners whose homes have experienced damage from flooding in the past, or may experience damage in the future. Such techniques include elevation of the home, relocating the home to higher ground, constructing floodwalls or berms, flood-proofing, and protecting utilities. For further information, contact the Lummi Nation Planning Department at (360) 384-2307 or the Federal Emergency Management Agency, Region X at (425) 487-4600.

Lummi Nation Floodplain Information Services: The tribe can determine the relationship of a particular property to the floodplain, including: 1) whether the property is located within the Special Flood Hazard Area; 2) Flood Insurance Rate Map (FIRM) Zone for property; and Base Flood Elevation for property, if available. Contact the Lummi Nation Water Resources Division at (360) 384-2212 for further information.

Flood Safety Tips

The Lummi Nation's website includes a Public Safety Information page with a link to information on family disaster planning. In addition, Whatcom County's Emergency Management Division has flood preparedness, response, and recovery information on their website at <http://www.co.whatcom.wa.us/dem/>. The county web site has links to road condition and closure information, sand bag availability and locations, and information on personal preparedness. The Lummi Nation hotline (360) 384-2365 provides hazard and closure information for the Lummi Indian Business Council and the Lummi Nation website provides information and links for current hazards.

Following is a list of important considerations that should be followed during times of flooding:

Prepare an evacuation plan: Before the floodwaters hit, develop an evacuation plan among all members of a household that includes a meeting place outside of the house, as well as an escape route out of the floodplain and away from floodwaters. See http://emd.wa.gov/plans/documents/family_emergency_preparedness_plan.pdf

Do not walk through flowing water: Drowning is the number one cause of flood deaths, mostly during flash floods. Currents can be deceptive, six inches of moving water can knock you off your feet. If you walk in standing water, use a pole or stick to ensure that the ground is still there before you step.

Do not drive through a flooded area: More people drown in their cars than anywhere else during a flood. Don't drive around road barriers; the road or bridge may be washed out. Turn around, don't drown.

Stay away from power lines and electrical wires: The number two flood killer after drowning is electrocution. Electrical current can travel through water. Report downed power lines to Puget Sound Energy and the Lummi Nation Police Department.

Shut off gas and electricity and move valuable contents upstairs: Be prepared in advance with a detailed checklist because warning of an impending flood may provide little time for preparation prior to evacuation.

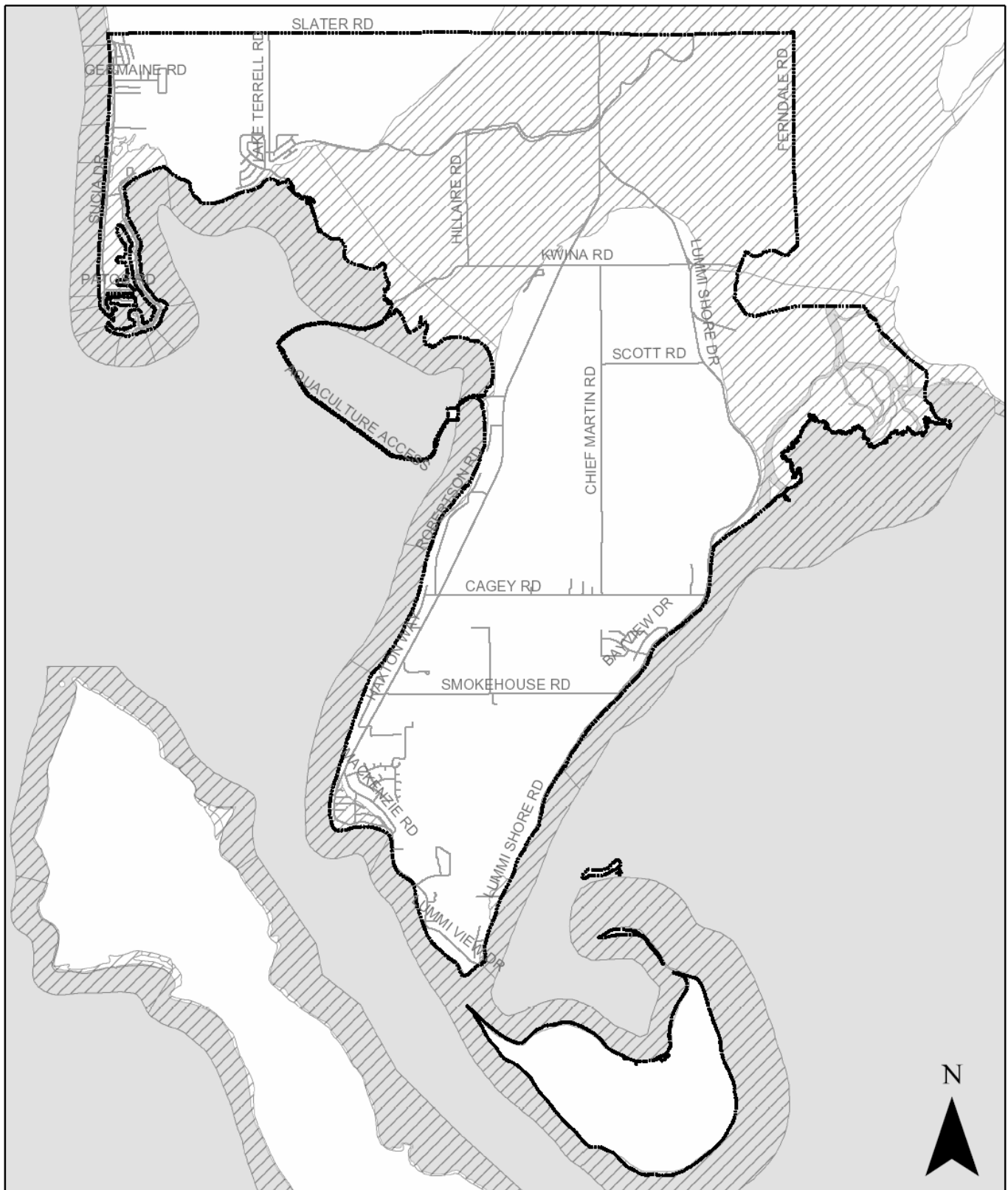
Look out for animals, especially snakes: Small animals that have been flooded out of their homes may seek shelter in yours. Use a pole or stick to poke and turn things over and scare away small animals.

Look before you step: After a flood, the ground and floors are covered with debris including broken bottles and nails. Floors and stairs that have been covered with mud can be very slippery.

Be alert for gas leaks: Use a flashlight to inspect for damage. Don't smoke or use candles, lanterns, or open flames unless you know that the gas has been turned off and the area has been ventilated.

Important Contact Information

- 1) Lummi Indian Business Council
2616 Kwina Road, Bellingham, WA 98226
Phone: (360) 384-1489
www.lummi-nsn.gov
- 2) Lummi Nation Planning Department:
Phone: (360) 384-2307
- 3) Lummi Nation Natural Resources Department
Phone: (360) 384-2267
- 4) Lummi Nation Police Department
Phone: (360) 384-2266
Emergency: 911
- 5) Federal Emergency Management Agency (FEMA)
Phone: (425) 487-4600
Web: <http://www.fema.gov/nfip/>
- 6) Whatcom County Library System (Houses floodplain publications and other floodplain information)
Phone: (503) 722-6222 and (503) 655-8543
Web: <http://www.wcls.org/>
- 7) National Marine Fisheries Service (NMFS)
Phone: (206) 526-6150
Web: <http://www.nmfs.noaa.gov/> (and) <http://www.nwr.noaa.gov/>
- 8) U.S. Army Corps of Engineers
Phone: (503) 808-4510
Web: <https://www.nwp.usace.army.mil/>



FEMA-mapped flood hazard area
on the Lummi Indian Reservation

